

## SEQUENCE LISTING

<110> Ottawa Health Research Institute

<120> Diabetogenic Epitopes

<130> 08899427WO

<140> Unknown

<141> Unknown

<150> US 60/535,278

<151> 2004-01-09

<160> 8

<210> 1

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> epitope

<400> 1

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln

1

5

10

<210> 2

<211> 2018

<212> DNA

<213> unknown

<220>

<223> wheat gene

<400> 2

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cgcgggcatg gccggcacgg cgagggggag cgtgaggagg agcagggccg tggccgtggg	300
cggcgcggcc agggagagcg tgaggaggag cagggccgtg gacgtgggcg gcgcggcgag	360
ggagagcgtg atgaggagca cggggatggc cggcgccgt acgtgttcgg cccgcgcagc	420

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aacgccgaga ggaacgagcg ggtgtggctc gccgggagga acaacgtgat cgccaagctg	1560
gacgaccccg ccaggagct cgccttcggc agggcccgca gggagggtgca ggagggttc	1620
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gagctggagc ccgtgccatt tgagagctga acttgatatgt gtgtgtagt ttgtcagtag	1860
gcgggagtag cataaataag tcgtggcagc ggctcagtag gatgatgtaa gttgcgtacc	1920
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<210> 3  
 <211> 588  
 <212> PRT  
 <213> unknown

<220>  
 <223> WP5212 sequence

<400> 3

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Thr Ser Leu Leu Phe Ala Ala Ala Val Ser Ala Ser His Asp Glu Glu
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Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys
          35           40           45

Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys
      50           55           60

Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly
65           70           75           80

Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly
          85           90           95

Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly
          100          105          110

Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly
          115          120          125

Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile
          130          135          140

Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu
145           150           155           160

Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met
          165           170           175

Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp
          180          185          190

Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu
          195          200          205

Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val
          210          215          220

Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg
225           230           235           240

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Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys  
 245 250 255  
 Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg  
 260 265 270  
 Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu  
 275 280 285  
 Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile  
 290 295 300  
 Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser  
 305 310 315 320  
 Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp  
 325 330 335  
 Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn  
 340 345 350  
 Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu  
 355 360 365  
 Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser  
 370 375 380  
 Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val  
 385 390 395 400  
 Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg  
 405 410 415  
 Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser  
 420 425 430  
 Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly  
 435 440 445  
 Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg  
 450 455 460  
 Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro  
 465 470 475 480  
 Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val  
 485 490 495  
 Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly  
 500 505 510  
 Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala  
 515 520 525  
 Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp

530

535

540

Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His  
 545 550 555 560

Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala  
 565 570 575

Val Glu Ala Phe Leu Arg Met Ala Thr Ala Ala Leu  
 580 585

<210> 4  
 <211> 290  
 <212> PRT  
 <213> unknown

<220>  
 <223> alpha/beta gliadin A-II precursor

<400> 4

Met Lys Thr Phe Pro Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr  
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Ala Thr Thr Ala Val Arg Val Pro Val Pro Gln Leu Gln Leu Gln Asn  
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Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln  
 35 40 45

Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro  
 50 55 60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro  
 65 70 75 80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro  
 85 90 95

Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln  
 100 105 110

Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln  
 115 120 125

Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg  
 130 135 140

Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val  
 145 150 155 160

Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln  
 165 170 175

Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val  
 180 185 190  
 Val His Ala Ile Ile Leu His Gln Gln His His His His Gln Gln Gln  
 195 200 205  
 Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln  
 210 215 220  
 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln  
 225 230 235 240  
 Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln  
 245 250 255  
 Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys  
 260 265 270  
 Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe  
 275 280 285  
 Gly Thr  
 290

<210> 5  
 <211> 307  
 <212> PRT  
 <213> unknown

<220>  
 <223> alpha/beta gliadin MM1 precursor

<400> 5

Met Lys Thr Phe Leu Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr  
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 Ala Arg Ile Ala Val Arg Val Pro Val Pro Gln Leu Gln Pro Gln Asn  
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 Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln  
 35 40 45  
 Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro  
 50 55 60  
 Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro  
 65 70 75 80  
 Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro  
 85 90 95  
 Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln  
 100 105 110

Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile  
 115 120 125  
 Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln  
 130 135 140  
 Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu  
 145 150 155 160  
 Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly  
 165 170 175  
 Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu  
 180 185 190  
 Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala  
 195 200 205  
 Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln Gln  
 210 215 220  
 Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln  
 225 230 235 240  
 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln  
 245 250 255  
 Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln  
 260 265 270  
 Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys  
 275 280 285  
 Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Val Gly Ile Phe  
 290 295 300  
 Gly Thr Asn  
 305

<210> 6  
 <211> 20  
 <212> PRT  
 <213> unknown

<220>  
 <223> diabetogenic epitope homopolymer

<400> 6

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Glu Glu Gln Leu Arg Glu  
 1 5 10 15

Leu Arg Arg Gln  
20

<210> 7  
<211> 18  
<212> DNA  
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<220>  
<223> primer

<400> 7

accacgggtt cgtcaagg

18

<210> 8  
<211> 18  
<212> DNA  
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<220>  
<223> primer

<400> 8

aacacctcct gcacctcc

18